

the condition of education 2004



INDICATOR 10

Writing Performance of Students in Grades 4, 8, and 12

The indicator and corresponding tables are taken directly from *The Condition of Education 2004*. Therefore, the page numbers may not be sequential.

Additional information about the survey data and supplementary notes can be found in the full report. For a copy of *The Condition of Education 2004* visit the NCES web site (<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2004077>) or contact ED PUBs at 1-877-4ED-PUBS.

Suggested Citation:

Wirt, J., Choy, S., Rooney, P., Provasnik, S., Sen, A., and Tobin, R. (2004). *The Condition of Education 2004* (NCES 2004-077). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.



Academic Outcomes

Writing Performance of Students in Grades 4, 8, and 12

The writing performance of 4th- and 8th-graders improved between 1998 and 2002. Twenty-eight percent of 4th-graders, 31 percent of 8th-graders, and 24 percent of 12th-graders performed at or above the Proficient level in 2002.

The National Assessment of Educational Progress (NAEP) assessed the performance of 4th-, 8th-, and 12th-graders in public and private schools in writing in 1998 and 2002, using the assessment reported here. Average scale scores increased at grades 4 and 8 from 1998 to 2002. In contrast, no significant change was detected at grade 12 (see supplemental table 10-1).

Achievement levels, which indicate what students should know and be able to do, provide another way to assess performance. In 2002, 28 percent of 4th-graders, 31 percent of 8th-graders, and 24 percent of 12th-graders performed at or above the *Proficient* level in writing. The percentages of 4th-graders at or above *Basic* and *Proficient* and 8th-graders at or above *Proficient* were higher in 2002 than in 1998. The percentage of 12th-graders at or above *Basic* decreased over the period. Although only 2 percent of students in each grade performed at *Advanced* in 2002, at all three grades, the percentage represented an increase.

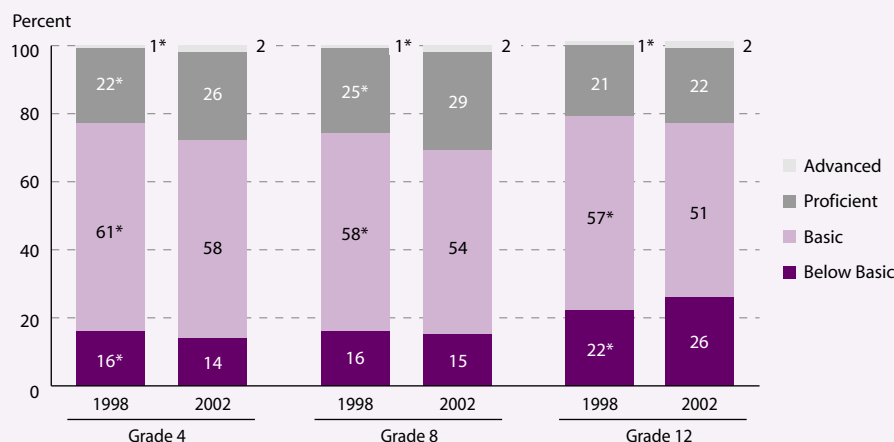
Average scores at selected percentiles provide another measure of achievement. At grade 4, writing scale scores increased at all percentile levels from 1998 to 2002. At grade 8, scale scores increased

at the 50th, 75th, and 90th percentiles, indicating performance gains for middle- to high-performing students. At grade 12, scores at the 10th and 25th percentiles decreased, while scores at the 90th percentile increased, indicating lower-performing students scored lower in 2002 than in 1998 and higher-performing students scored higher.

In 2002, writing performance differed among subgroups. Females outperformed males at all three grades (see supplemental table 10-2). Asian/Pacific Islander and White students had higher average scale scores than their Black and Hispanic peers at all three grades, and Asian/Pacific Islanders had higher average scores than Whites at grade 4. In addition, parental education was positively related to academic achievement in grades 8 and 12, and the percentage of students in a school eligible for free or reduced-price lunch was negatively related to student achievement at all three grades.

NAEP also provided a comparison of public school students by state and jurisdiction in 4th grade in 2002 and in 8th grade in 1998 and 2002. Of the 36 states and jurisdictions participating in grade 8 in 1998 and 2002, 16 showed score increases (see supplemental table 10-3).

WRITING PERFORMANCE: Percentage distribution of students performing at each writing achievement level, by grade: 1998 and 2002



*Significantly different from 2002.

NOTE: Detail may not sum to totals because of rounding. See *supplemental note 4* for more information on the National Assessment of Educational Progress (NAEP), including information on achievement levels.

SOURCE: U.S. Department of Education, NCES. (2003). *The Nation's Report Card: Writing 2002* (NCES 2003-529), table 2.1 and NAEP web data tool (<http://nces.ed.gov/nationsreportcard/naepdata/>). Data from U.S. Department of Education, NCES, National Assessment of Educational Progress (NAEP), 1998 and 2002 Writing Assessments.

FOR MORE INFORMATION:

Supplemental Notes 1,4
Supplemental Tables 10-1,
10-2, 10-3



Writing Performance of Students in Grades 4, 8, and 12

Table 10-1. Average writing scale score by percentile and percentage of students at or above each writing achievement level, by grade: 1998 and 2002

Percentile and achievement level	Grade 4		Grade 8		Grade 12	
	1998	2002	1998	2002	1998	2002
Average scale score						
Total	150*	154	150*	153	150	148
Percentile						
10th	105*	108	104	104	104*	97
25th	126*	130	127	128	126*	121
50th	151*	154	151*	155	150	149
75th	174*	179	175*	180	174	176
90th	195*	200	194*	201	195*	200
Percentage at achievement level						
Below Basic	16*	14	16	15	22*	26
At or above Basic	84*	86	84	85	78*	74
At or above Proficient	23*	28	27*	31	22	24
At Advanced	1*	2	1*	2	1*	2

*Significantly different from 2002.

NOTE: See *supplemental note 4* for more information on the National Assessment of Educational Progress (NAEP), including information on achievement levels.

SOURCE: U.S. Department of Education, NCES. (2003). *The Nation's Report Card: Writing 2002* (NCES 2003–529), figures 2.1 and 2.2 and table 2.1. Data from U.S. Department of Education, NCES, National Assessment of Educational Progress (NAEP), 1998 and 2002 Writing Assessments.

Writing Performance of Students in Grades 4, 8, and 12

Table 10-2. Average writing scale score for 4th-, 8th-, and 12th-graders, by selected student and school characteristics: 2002

Student or school characteristic	Grade 4	Grade 8	Grade 12
Total	154	153	148
Sex			
Male	146	143	136
Female	163	164	160
Race/ethnicity ¹			
American Indian	139	137	—
Asian/Pacific Islander	167	161	151
Black	140	135	130
White	161	161	154
Hispanic	141	137	136
Parents' education			
Less than high school	—	136	129
High school diploma or equivalent	—	144	139
Some college, including vocational/technical	—	156	149
Bachelor's degree or higher	—	165	158
How often student reads for fun			
Almost every day	160	168	165
1–2 times a week	156	155	154
1–2 times a month	148	153	149
Never or hardly ever	140	143	136
Number of books in the home			
0–10	132	126	120
11–25	142	138	132
26–100	158	154	147
More than 100	163	167	163
Control			
Public	153	152	146
Private	166	170	168
Location			
Central city	150	147	148
Urban fringe/large town	159	158	153
Rural/small town	152	153	143
Enrollment			
Less than 300	154	156	150
300–999	155	154	148
1,000 or more	152	152	149
Percent of students in school eligible for free or reduced-price lunch			
0–10	172	173	160
11–25	162	160	150
26–50	154	151	142
51–75	146	143	134
76–100	137	129	130

—Not available.

¹American Indian includes Alaska Native, Black includes African American, Pacific Islander includes Native Hawaiian, and Hispanic includes Latino. Racial categories exclude Hispanic origin.

NOTE: See *supplemental note 4* for more information on the National Assessment of Educational Progress (NAEP). See *supplemental note 1* for information on parents' education and location.

SOURCE: U.S. Department of Education, NCES. (2003). *The Nation's Report Card: Writing 2002* (NCES 2003–529), figure 3.1 and tables 3.2, 3.9, 3.11, and 3.14 and previously unpublished tabulation (October 2003). Data from U.S. Department of Education, NCES, National Assessment of Educational Progress (NAEP), 2002 Writing Assessment.

Writing Performance of Students in Grades 4, 8, and 12

Table 10-3. Average writing scale score for public school 4th- and 8th-graders and change in score since 1998 among 8th-graders, by state and jurisdiction: 2002

State or jurisdiction	Grade 4	Grade 8	Change from 1998 average scale score
	Average scale score in 2002	Average scale score in 2002	
Nation	153	152	4**
Alabama	140*	142*	-2
Arizona	140*	141*	-2
Arkansas	145*	142*	5**
California ¹	146*	144*	3
Connecticut	174*	164*	-1
Delaware	163*	159*	14**
Florida	158*	154	12**
Georgia	149*	147*	1
Hawaii	149*	138*	2
Idaho	150	151	—
Indiana	154	150	—
Iowa ¹	155	—	—
Kansas ¹	149*	155	—
Kentucky	154	149	4
Louisiana	142*	142*	7**
Maine	158*	157*	2
Maryland	157*	157*	10**
Massachusetts	170*	163*	9**
Michigan	147*	147*	—
Minnesota ¹	156*	—	—
Mississippi	141*	141*	7**
Missouri	151	151	9**
Montana ¹	149	152	1
Nebraska	154	156*	—
Nevada	145*	137*	-2
New Mexico	142*	140*	-1
New York ¹	163*	151	5**
North Carolina	159*	157*	6**
North Dakota ¹	150*	147*	—
Ohio	157*	160*	—
Oklahoma	142*	150	-2
Oregon ¹	149*	155	5**
Pennsylvania	156*	154	—
Rhode Island	157*	151	3**
South Carolina	145*	146*	6**
Tennessee ¹	149*	148*	#
Texas	154	152	-2
Utah	145*	143*	#
Vermont	158*	163*	—
Virginia	157*	157*	3**
Washington ¹	158*	155	7
West Virginia	147*	144*	#

See notes at end of table.

Writing Performance of Students in Grades 4, 8, and 12

Table 10-3. Average writing scale score for public school 4th- and 8th-graders and change in score since 1998 among 8th-graders, by state and jurisdiction: 2002—Continued

State or jurisdiction	Grade 4	Grade 8	Change from 1998 average scale score
	Average scale score in 2002	Average scale score in 2002	
Wyoming	150	151	6**
Other jurisdictions			
District of Columbia	135*	128*	2
DDESS ²	156*	164*	5
DoDDS ³	159*	161*	5**
Guam	131*	130*	—
Virgin Islands	125*	128*	5

— Not available.
#Rounds to zero.
*Significantly different from national average in 2002.
**Change in score is statistically significant.
¹Jurisdiction did not meet one or more of the guidelines for school participation in 2002.
²Department of Defense Domestic Dependent Elementary and Secondary Schools.
³Department of Defense Dependent Schools (overseas).
NOTE: The National Assessment of Educational Progress (NAEP) at the state level includes only public schools, while other reported national results in this indicator include both public and private school students. Variations or changes in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP sample may have affected comparative performance results. See *supplemental note 4* for more information on NAEP.
SOURCE: U.S. Department of Education, NCES. (2003). *The Nation's Report Card: Writing 2002* (NCES 2003–529), tables 2.2 and 2.3 and previously unpublished tabulation (October 2003). Data from U.S. Department of Education, NCES, National Assessment of Educational Progress (NAEP), 1998 and 2002 Writing Assessments.

Writing Performance of Students in Grades 4, 8, and 12

Table S10. Standard errors for the percentage distribution of students performing at each writing achievement level, by grade: 1998 and 2002

Achievement level	Grade 4		Grade 8		Grade 12	
	1998	2002	1998	2002	1998	2002
Below Basic	0.44	0.38	0.50	0.40	0.65	0.68
Basic	0.56	0.44	0.51	0.47	0.70	0.73
Proficient	0.73	0.39	0.68	0.54	0.68	0.74
Advanced	0.15	0.11	0.10	0.14	0.14	0.22

SOURCE: U.S. Department of Education, NCES, (2003). *The Nation's Report Card: Writing 2002* (NCES 2003–529) and NAEP web data tool (<http://nces.ed.gov/nationsreportcard/naepdata/>). Data from U.S. Department of Education, NCES, National Assessment of Educational Progress (NAEP), 1998 and 2002 Writing Assessments.

Writing Performance of Students in Grades 4, 8, and 12

Table S10-1. Standard errors for the average writing scale score by percentile and percentage of students at or above each writing achievement level, by grade: 1998 and 2002

Percentile and achievement level	Grade 4		Grade 8		Grade 12	
	1998	2002	1998	2002	1998	2002
Average scale score						
Total	0.67	0.43	0.63	0.54	0.66	0.80
Percentile						
10th	0.79	0.77	0.78	0.80	0.86	0.88
25th	0.61	0.57	0.72	0.67	0.76	1.24
50th	0.59	0.42	0.74	0.61	0.78	1.02
75th	0.86	0.48	0.84	0.66	0.81	0.94
90th	0.80	0.51	0.89	0.70	0.86	1.31
Percentage at achievement level						
Below Basic	0.44	0.38	0.50	0.40	0.65	0.68
At or above Basic	0.44	0.38	0.50	0.40	0.65	0.68
At or above Proficient	0.77	0.43	0.72	0.57	0.73	0.79
At Advanced	0.15	0.11	0.10	0.14	0.14	0.22

SOURCE: U.S. Department of Education, NCES. (2003). *The Nation's Report Card: Writing 2002* (NCES 2003–529) and NAEP web data tool (<http://nces.ed.gov/nationsreportcard/naepdata/>). Data from U.S. Department of Education, NCES, National Assessment of Educational Progress (NAEP), 1998 and 2002 Writing Assessments.

Writing Performance of Students in Grades 4, 8, and 12

Table S10-2. Standard errors for the average writing scale score for 4th-, 8th-, and 12th-graders, by selected student and school characteristics: 2002

Student or school characteristic	Grade 4	Grade 8	Grade 12
Total	0.43	0.54	0.80
Sex			
Male	0.55	0.61	0.84
Female	0.41	0.57	0.86
Race/ethnicity			
American Indian	1.93	2.86	—
Asian/Pacific Islander	1.51	1.99	2.41
Black	0.68	0.71	1.26
White	0.32	0.57	0.84
Hispanic	1.64	0.88	1.54
Parents' education			
Less than high school	—	0.90	1.66
High school diploma or equivalent	—	0.57	1.05
Some college, including vocational/technical	—	0.60	0.89
Bachelor's degree or higher	—	0.58	1.04
How often student reads for fun			
Almost every day	0.52	0.66	1.27
1–2 times a week	0.51	0.55	1.41
1–2 times a month	0.70	0.61	0.97
Never or hardly ever	0.54	0.66	0.84
Number of books in the home			
0–10	1.31	0.77	1.03
11–25	0.66	0.58	1.08
26–100	0.39	0.56	0.76
More than 100	0.46	0.67	1.05
Control			
Public	0.47	0.60	0.90
Private	0.90	0.94	1.52
Location			
Central city	0.60	0.87	1.40
Urban fringe/large town	1.05	0.85	1.34
Rural/small town	0.39	0.69	1.10
Enrollment			
Less than 300	1.07	0.94	2.36
300–999	0.52	0.75	1.20
1,000 or more	2.02	0.88	1.38
Percent of students school eligible for free or reduced-price lunch			
0–10	0.88	0.97	1.57
11–25	0.73	0.78	1.47
26–50	0.65	0.65	1.28
51–75	0.89	0.72	2.32
76–100	0.89	1.05	2.62

—Not available.

SOURCE: U.S. Department of Education, NCES. (2003). *The Nation's Report Card: Writing 2002* (NCES 2003–529) and NAEP web data tool (<http://nces.ed.gov/nationsreportcard/naepdata/>). Data from U.S. Department of Education, NCES, National Assessment of Educational Progress (NAEP), 2002 Writing Assessment.

Writing Performance of Students in Grades 4, 8, and 12

Table S10-3. Standard errors for the average writing scale score for public school 4th- and 8th-graders and change in score since 1998 among 8th-graders, by state and jurisdiction: 2002

State or jurisdiction	Grade 4	Grade 8	Change from 1998 average scale score
	Average scale score in 2002	Average scale score in 2002	
Nation	0.47	0.60	0.88
Alabama	1.37	1.52	2.07
Arizona	1.50	1.60	2.21
Arkansas	1.02	1.34	1.81
California	2.83	1.81	2.54
Connecticut	1.26	1.55	2.06
Delaware	0.74	0.57	1.55
Florida	1.42	1.58	2.01
Georgia	1.24	1.39	1.94
Hawaii	0.97	0.84	1.31
Idaho	1.32	1.29	—
Indiana	1.23	1.47	—
Iowa	1.39	—	—
Kansas	1.67	1.47	—
Kentucky	1.41	1.13	1.90
Louisiana	1.34	1.58	2.09
Maine	1.60	1.24	1.91
Maryland	1.48	1.52	2.14
Massachusetts	1.31	1.52	2.27
Michigan	1.29	1.65	—
Minnesota	1.23	—	—
Mississippi	1.26	1.11	1.71
Missouri	1.33	1.22	1.89
Montana	2.18	1.26	1.92
Nebraska	1.55	1.25	—
Nevada	1.02	0.94	1.28
New Mexico	1.62	1.13	1.40
New York	1.65	1.65	2.22
North Carolina	1.38	1.28	1.94
North Dakota	1.04	1.20	—
Ohio	1.41	2.06	—
Oklahoma	1.21	1.22	1.76
Oregon	1.65	2.08	2.58
Pennsylvania	1.29	1.36	—
Rhode Island	1.27	0.76	1.00
South Carolina	1.31	1.14	1.58
Tennessee	1.29	1.45	2.29
Texas	1.65	1.62	2.21
Utah	0.97	1.05	1.62
Vermont	1.36	1.20	—
Virginia	1.27	1.29	1.76
Washington	1.38	1.79	2.36
West Virginia	1.28	1.35	2.13

See notes at end of table.

Writing Performance of Students in Grades 4, 8, and 12

Table S10-3. Standard errors for the average writing scale score for public school 4th- and 8th-graders and change in score since 1998 among 8th-graders, by state and jurisdiction: 2002—Continued

State or jurisdiction	Grade 4	Grade 8	Change from 1998 average scale score
	Average scale score in 2002	Average scale score in 2002	
Wyoming	1.08	0.87	1.67
Other jurisdictions			
District of Columbia	1.04	0.77	1.41
DDESS	1.11	1.50	2.99
DoDDS	0.75	0.76	1.43
Guam	1.00	1.43	—
Virgin Islands	1.52	1.23	3.96

— Not available.

SOURCE: U.S. Department of Education, NCES. (2003). *The Nation's Report Card: Writing 2002* (NCES 2003–529) and NAEP web data tool (<http://nces.ed.gov/nationsreportcard/naepdata/>). Data from U.S. Department of Education, NCES, National Assessment of Educational Progress (NAEP), 1998 and 2002 Writing Assessments.